

Subj:	<b>The dollar and cents scale</b>
Date:	06/30/2001 10:45:59 AM Central Daylight Time
From:	<a href="#">EricNumis</a>
To:	<a href="mailto:lehitchins@bes.org.uk">lehitchins@bes.org.uk</a>

Dear Diana: I am very appreciative of your prompt and clear response to the letter I sent on the above scale. You have solved most of my problems. The dust caps for the fulcrum are shiny and have blue areas and are screwed on to the bottom of the vertical fulcrum holder (I do not know its technical name). The cylindrical box ends near each end of the beam are one piece slotted out to fit over the swan neck. They appear to be of the same metal as the dust caps for the fulcrum. Does this mean that they were heated or was there a different kind of iron or steel used? I assume that the cylindrical pieces were forced on and not soldered. As to the knife which pierces the center of the cylindrical box end I assume it has a sharp edge at the top to hold the figure 8 linkage. I agree that the scale and pans are too small for the box but that the two parts were put together for export. The embossment is not American and must have been put on in England. There are guide lines for the top and bottom of the embossment scratched onto the lid of the box which scratches extend to the edges of the box beyond the embossment. I assume the D cut out for weights had no separate cover but using coin weights how did they adjust for short weight pieces (just reject them). I agree that the label had to be printed in America and a supply kept to paste on the underside of the lid. The same scale could be used for money of account areas with a different label. The absence of grain weights confuses me a little but perhaps they might have just estimated grains roughly after the nearest dwt was arrived at. What is the animal on the weight? Was there a tassel on the top link or not? I look forward to any comments you care to make. Thrive. My best. Eric



Subj:	<b>US scales</b>
Date:	06/28/2001 1:57:14 PM Central Daylight Time
From:	<a href="#">LeHitchins</a>
To:	<a href="#">EricNumis</a>

EricNumis

Dear Eric,

We have to think about the box, the label, the beam (and pans) and the weights separately, because they give different, contradictory evidence. Life is never simple!

**The Box**

It looks to me like the work of an English box maker, c.1730-40. The shape of the outside, the wire hinges and the D-shaped pens, the shape of the hole for the beam, the location of the stamped decoration and the shape of the hooks are all English. The wood (using the photo only as evidence) looks like fruit-wood, being too pale and soft to be mahogany. The contradictory point is the pattern of the bookbinders' stamps. I have never seen as fine a scrolly flower pattern as that on any English box. My thought is, "Was this box made by an Englishman living in America, where he had access to top-quality bookbinders' stamps?"

**The Label**

This is strictly American. The English had no use for a list of valuations in dollars and cents. So either it was stuck into a rare English box, or it was stuck into an American box.

**The Beam**

This beam was not made for this box. It is far too short, and the pans are far too small. It is a marriage. It looks like an English beam, made by a fine maker, probably to go in a top-quality oval-japanned box, c.1775-80. It should be described as a leaf-section beam (xxins. long) with standard box-ends, and dust-caps covering the central fulcrum. Are the dust-caps made of blued steel?

The box-ends were made by taking a beam with swan-neck ends. The swan-necks were filed to be parallel. Round (or oval) flat sheets were soft-soldered onto the swan-necks, leaving the bottoms open. The knives were driven through fine holes drilled across the box-ends, and were held there by being a tight fit. The 8-shaped suspension hooks were hooked onto the knives, and the cords attached to the lower end of the 8. You may be wondering why they are called box-ends when they are round. Just tradition!! The aim was to protect the knives from dust and dirt and damage.

**The Weights**

A handsome set, made in London, (or stamped with pseudo-London verification marks). These sets of pennyweights are extremely rare in England, as we used coin-weights normally, not pennyweights, so I'm not experienced enough to make helpful remarks. Norman Biggs would help you better. But they look okay to me, and were made during the period 1730-1800.

Best wishes Diana



<b>Subj:</b> US scales <b>Date:</b> 06/28/2001 1:57:14 PM Central Daylight Time <b>From:</b> <a href="mailto:LeHitchins@BES.ORG.UK">LeHitchins@BES.ORG.UK</a> <b>To:</b> <a href="mailto:EricNumis">EricNumis</a>
--

EricNumis

Dear Eric,

We have to think about the box, the label, the beam (and pans) and the weights separately, because they give different, contradictory evidence. Life is never simple!

#### The Box

It looks to me like the work of an English box maker, c.1730-40. The shape of the outside, the wire hinges and the D-shaped pans, the shape of the hole for the beam, the location of the stamped decoration and the shape of the hooks are all English. The wood (using the photo only as evidence) looks like fruit-wood, being too pale and soft to be mahogany. The contradictory point is the pattern of the bookbinders' stamps. I have never seen as fine a scrolly flower pattern as that on any English box. My thought is, "Was this box made by an Englishman living in America, where he had access to top-quality bookbinders' stamps?"

#### The Label

This is strictly American. The English had no use for a list of valuations in dollars and cents. So either it was stuck into a rare English box, or it was stuck into an American box.

#### The Beam

This beam was not made for this box. It is far too short, and the pans are far too small. It is a marriage. It looks like an English beam, made by a fine maker, probably to go in a top-quality oval-japanned box, c.1775-80. It should be described as a leaf-section beam (xxins. long) with standard box-ends, and dust-caps covering the central fulcrum. Are the dust-caps made of blued steel?

The box-ends were made by taking a beam with swan-neck ends. The swan-necks were filed to be parallel. Round (or oval) flat sheets were soft-soldered onto the swan-necks, leaving the bottoms open. The knives were driven through fine holes drilled across the box-ends, and were held there by being a tight fit. The 8-shaped suspension hooks were hooked onto the knives, and the cords attached to the lower end of the 8. You may be wondering why they are called box-ends when they are round. Just tradition!! The aim was to protect the knives from dust and dirt and damage.

#### The Weights

A handsome set, made in London, (or stamped with pseudo-London verification marks). These sets of pennyweights are extremely rare in England, as we used coin-weights normally, not pennyweights, so I'm not experienced enough to make helpful remarks. Norman Biggs would help you better. But they look okay to me, and were made during the period 1730-1800.

Best wishes Diana



Subj:	Re: coin-scales
Date:	06/27/2001 12:44:44 PM Central Daylight Time
From:	<a href="#">EricNumis</a>
To:	<a href="#">LeHitchins</a>

Thanks Diana for your prompt reply to my letter. It arrived faster than interior US mail to our big cities. I think my Email went astray because I used a bad address. There is nothing in the Email on the scale subject which is not covered in the letter. In the letter however I believe I did not describe the attachment for suspension holders properly. I now think the beam rather close to each end is formed with a rising semicircle (not a cut out notch) and that the cylindrical caps with cut out interiors are squeezed or forced over that semicircle for attachment. Then the pin is driven halfway through the cylindrical piece, the suspension link inserted over the pin end, and the pin driven through into the back side of the cylindrical piece. This protects the suspension link and enables it to be completely clear of contact with the beam when upright. The projection of each end of the beam you will notice from the picture is much thinner and ends in a tiny ball. Is this a usual or unusual attachment? Does it help date or identify the scale? Eric



Subj:	<b>coin-scales</b>
Date:	06/26/2001 3:52:08 PM Central Daylight Time
From:	<a href="#">LeHitchins</a>
To:	<a href="#">EricNumis</a>

Dear Eric,

Your excellent photos arrived today, but I didn't get your email this month. Please will you try again.

I think it best to wait until I've read your e-mail, then I'll write you a proper report. Okay?

Best wishes Diana



Diana Crawforth-Hitchins  
15 Hawthorn Ave  
Headington, Oxford  
OX39JQ  
United Kingdom

22 June 2001

Dear Diana:

I am following up on my letter to you of 9 March 2001, your reply of 13 March, 2001 and my email about a week ago on the English scale with a label converting gold coin into U.S. dollars and cents.

I need your comments on a few items before I write my article.

I find that the text of the label is almost identical to the U.S. Act of Congress of 9 February 1793 and to what is published in the U.S. almanacs of the period.

The fact that the label relates only to gold coin and not to silver coin is because silver exchange was always regulated for America by the Queen Anne Proclamation of 1704 and acts of Parliament etc., relating to America but curiously never mention gold coin. They only wanted to control small transactions against money of account.

The fact that no gold coin denominations are listed in the label is probably because any gold in circulation was filed, clipped or abused and it was folly to think it was full weight. It may also have been to save space not to list various denominations.

I am enclosing photographs of the scale box etc. to help you on the date of manufacture of the scale and box. The box is mahogany not fruitwood. The design on the top of the lid is partly visible on the photos but it is a clear black embossment all around as shown on the drawing I previously sent.

The weights are all brass, the larger with the raised animal side view facing left. They are 1 @ 6 dwts, 5 @ 5 dwts, 3 @ 3 dwts, 4 @ 2 dwts, and 3 @ 1 dwt., plus 2 pharmaceutical weights. No grain weights.

The type for the label was available in both England and America so the label could have been printed in either place. What is your thought?

I need your help in describing the support for the pan hangers and your help in dating the equipment. The beam is iron with flat sides. It has a thin top and bottom. The support holders are 11 mm diameter discs and cut out underneath to fit over the top of the flat beam. A horizontal pin is driven through the center of the discs to the other side. The top link of the suspension for the pan strings is slipped over the pin and then the pin when going through is hammered into the far side. The suspension is thus protected as you show in your article in EQM. The pin is hammered flat on both sides of the circular faces of the cylinder. I believe each disc is held in place only by the slot in the disc being pressed or heated onto the beam. The beam may be notched underneath to make room for the horizontal pin, but I cannot see in there. What do you think?

For any further questions you have you may Email me:  
ERICNUMIS@AOL.COM

Thank you so much for your helpfulness. I look forward to hearing from you.  
Thrive,



Subj:	Article for EQUILIBRIUM
Date:	06/15/2001 1:46:36 PM Central Daylight Time
From:	<a href="#">EricNumis</a>
To:	<a href="mailto:LESHUTCHINS@BES.ORG.UK">LESHUTCHINS@BES.ORG.UK</a>

Dear Diana: My delay in answering your 13 March 2001 letter about the above was due to a nuisance ailment which people over 80 ( I am 90) seem to contract but I believe it is being successfully treated. It is cranial arteritis.

Your wonderful article on definitions and the article on Portuguese gold coins stimulated me to Email you before I write you in detail to ask you some questions and answer some of yours. However I am so excited about this discovery of the first dollars and cents American coin scale I have a couple of quick comments and questions.

I I have located an American statute of July 1793 with similar content to the scale label and a 1794 New England almanac (obviously prepared in 1793) with virtually identical content to the label. Does this change your dating of the English made balance? The darkness of the wood makes it appear to be mahogany rather than fruitwood which I originally told you. The weights have a raised side view of a standing animal facing left in an oblong rectangle. What is this mark? The weights are virtually all pennyweights, some with punched in dots and some blank. The suspension points are somewhat distant from the end of the beam ends and are discs pinned horizontally onto the beam and hollowed on the inside to protect the horizontal hanging pin for the chains to support the pans. It seems different from those you illustrate. I will send you pictures and further detail but a few hints from you about the above will be most appreciated. My wife joins me in wishing you well. Eric



To: Diana Hitchins

From: Eric P. Neumann

My delay in answering your 13 March 2001 letter was due to a nuisance ailment which people over 80 seem to contract, but mine is now being treated successfully. I am 90.

I have carefully studied the balance I wrote you about and which I am writing an article about for EQUILIBRIUM. I have a few comments and questions to ask you about.

The box is mahogany rather than fruitwood. The coin weights are all pennyweights from 1 to 6. There were no coin weights and no grain weights. There were 18 weights in all (2 pharmaceutical weights so I presume there were additions). Virtually all weights had the <sup>standing</sup> animal in the oblong depression facing left.

There is no label printer and no date BUT — the text of the label is virtually identical to an exchange table for the same coins published in a 1794 New England Almanac (obviously prepared in late 1793) which follows the July 1793 U.S. statute wording providing for the value in "dollars and cents" for those foreign coins circulating in U.S. Thus I have the source of the text of the label. The fact that the coins are not named or described is because all gold coins <sup>in circulation</sup> were clipped, filed or abused and none had full weight and the true value was what the balance was for. The fineness differential of the British-Portuguese and the French-Spanish was small but necessary to show.

What I would like from you is a few further thoughts and guidance.

1. Is the date of the balance around 1793 when compared to English balances?

2. Would grain weights be customary in such a scale?

3. What do you call the two chain suspension holders that are <sup>of cylinder</sup> <sup>from the bottom</sup> hollowed on the inside and pinned <sup>horizontally</sup> ~~to~~ the outside ends of the balance beam?





---

## INTERNATIONAL SOCIETY OF ANTIQUE SCALE COLLECTORS

---

15, Hawthorn Avenue,  
Headington,  
Oxford. OX3 9JQ.  
Tel (01865) 763096.  
Fax (01865) 751797.  
Email Les.Hitchins@bcs.org.uk  
13 March, 2001

To Eric Newman,  
6450 Cecil Avenue,  
St Louis,  
Missouri 63105.

Dear Eric,

How nice to hear from you. I'm delighted that you and Evelyn are both enjoying life.

As to your prospective article, I think it's a great idea. Please write it. There's not much help I can give you. I agree that it's probably London-made, some time between 1740 and 1770. The fruitwood boxes are nearly all very pale, whereas the mahogany boxes are much richer and browner. Perhaps you could use the phrases "cut-from-solid", "green silk cords" and "bookbinders' stamps"?

I wish you'd told me exactly what units the weights are. I guess that, given the label, they are all pennyweight or grain weights, (with no coin weights). Nothing else would be easily convertible into money values. I note that the gold of Great Britain and Portugal is valued more highly than that of France and Spain. In this country, at that time, we did not consider the French or Spanish gold was of a lower quality.

I think the label is superb, and very exciting. I like the way it goes from 23 grains to 1 pwt without telling the user that 24 grains make one pennyweight. The printer just assumed everyone knew. And the weights cover all the coin weights up to a doubloon. Excellent. Any sign of who the printer was?

I thought that each Colony (when they still existed) valued gold at different rates, and that was why each Colony had its own column on the coin labels. Did they unify the currency in 1793?

I would greatly appreciate photographs of everything, the beam, the stamps on the box, the label, the inside of the box, the verification marks and all the weights in a row.

Between you, Gary Batz and Eugene Mahoney, we're gradually able to publish a much more comprehensive view of early American coin scales, which pleases me enormously. With your book to guide me, I'm slowly getting a feel for what was happening in America before 1800.

I am amazed that so few American coin scales have survived. In this country we have large numbers of them, more per head of population of the 18th century I guess than you have for your population then. Well, maybe not. You only had a very tiny population then I suppose.

*Best wishes*  
*Diana*



ERIC P. NEWMAN NUMISMATIC EDUCATION SOCIETY

6450 Cecil Avenue, St. Louis, Missouri 63105

Diana Crawford-Hutchins  
15 Hawthorn Ave  
Headington, Oxford  
OX39JQ  
United Kingdom

9 March 2001

Dear Diana:

I have recently acquired an unusual item to write up for Equilibrium. It is a coin scale with an entirely unknown label so far as I know. It is British made and adapted for American use and seems too be the first coin scale for use everywhere in America. There are coin scales of British origin for specific separate areas such as New England, Pennsylvania or New York, but none earlier for all of the colonies, or for all of the states after independence, I believe.

It has an interior pasted-in label converting English and Portuguese gold coins by weight into "dollars and cents" on the left side and French and Spanish gold coins by weight into "dollars and cents" on the right side. No coin denominations are mentioned, only numerical tables of weights and values. The term "United States" is not mentioned. This was the language of the first legal tender laws of the United States passed February 9, 1793, April 30, 1802 and April 10, 1806 as to British and Portuguese gold coins being worth 27 grains per 100 cents and French and Spanish gold coins worth  $27 \frac{2}{5}$  grains per 100 cents. The label relates to these ratios.

The box containing the scale is  $5 \frac{3}{4}$ " long,  $2 \frac{5}{8}$ " wide and  $\frac{7}{8}$ " deep. The two sides of the box are curved and smooth. The front and back sides are smooth as is the bottom. The box (except for the lid) is one solid piece of wood with three irregular openings drilled and cut out, two to hold the weights and one for the scale. It was lined with blue gray paper. The lid is decorated with pressed in floral designs  $\frac{5}{8}$ " long and  $\frac{3}{16}$ " wide. The design is repeated around the perimeter and with two parallel vertical panels in the center. There is a flat horizontal clasp which connects to a loop rising from the front lip of the box through the lid and there was another clasp which is now missing. The brass pans are  $1 \frac{5}{8}$ " in diameter suspended by three green strings each. The iron beam is  $4 \frac{1}{4}$ " long with cylinder shaped additions of  $\frac{5}{16}$ " diameter to hold the suspension links.

The weights have an elevated side view of a lion facing left inside a rectangular depression. The <sup>generally</sup> pennyweights are marked with circles from 1 to 6 and all of the weights are rectangular or squarish ~~brass~~.

I am sending such sketched detail as I can. Any information you can give me would be helpful and most appreciated. Any further questions you have I will try to answer. If a similar clasp from an old scale box is available that would be great as I remember you once had a box of missing parts.



Evelyn and I are fine and send you our best wishes, remembering the wonderful visit to your home outside Newcastle long ago. We recently went to the Scilly Islands on a cruise and the garden was sensational as was the ship museum. We had wonderful tropical weather, not what usually takes place and gives the local ship from Cornwall the colorful name "Stomach Pump".

I look forward to hearing from you and will write up the item as promptly as I can assemble the available facts.

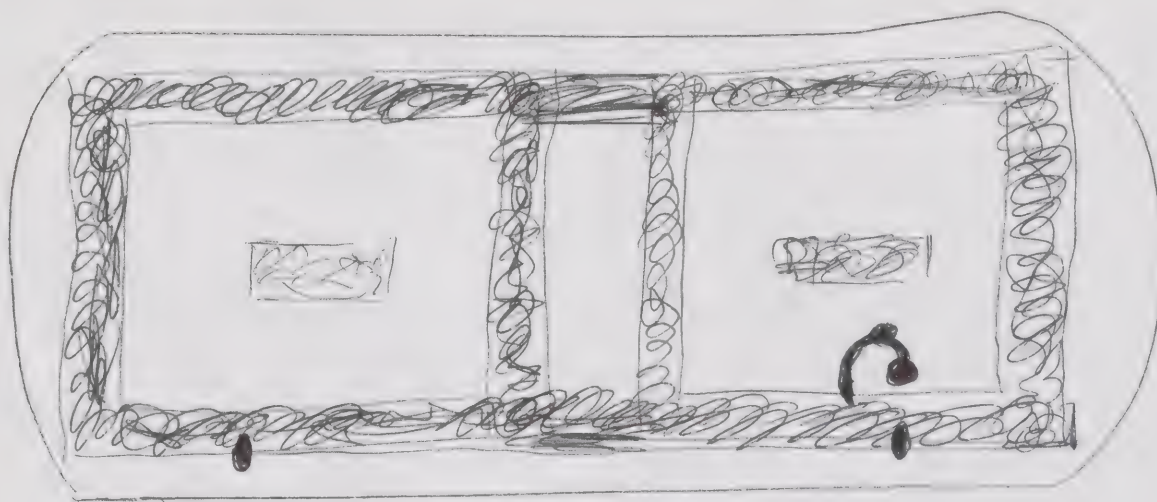
I hope you and yours are thriving.

Sincerely,

A handwritten signature in dark ink, appearing to be 'Eric P. Newman', written in a cursive style.

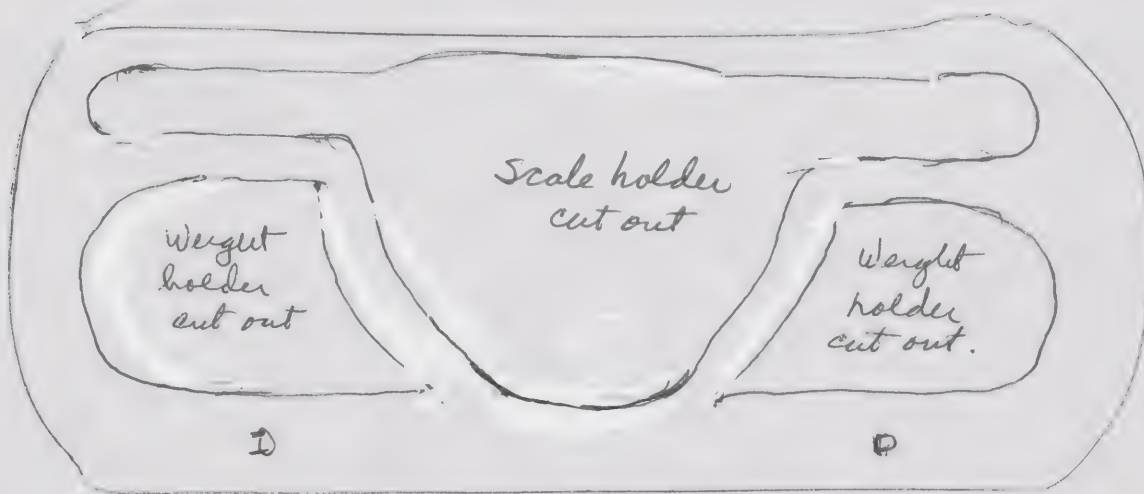
Eric P. Newman





Dark area  
is floral  
impressed  
decoration

Solid black  
are projecting  
clasp loops  
and clasp.



View when  
lid is  
open.

clasp loops

Seems to be pearwood as it has no visible  
growth lines.



# Inside label of hand held balance

A TABLE in which the gold coins of Great Britain and Portugal are reduced to an equivalent value in dollars and cents.

gr	ct	g.	c.	pwt	dLct	pwt	dol	ct
1	3	13	48	1	0,89	11	9	78
2	7	14	51	2	1,78	12	10	67
3	11	15	55	3	2,67	13	11	55
4	14	16	59	4	3,55	14	12	44
5	18	17	63	5	4,44	15	13	33
6	22	18	67	6	5,33	16	14	22
7	25	19	70	7	6,22	17	15	11
8	29	20	74	8	7,11	18	16	00
9	33	21	78	9	8,00	19	16	89
10	37	22	81	10	8,89	20	17	78
11	40	23	85					
12	44							

A TABLE in which the gold coins of France and Spain are reduced to an equivalent value in dollars and cents

gr	ct	gr	ct	pwt	dLct	pwt	dol	ct
1	3	13	47	1	0,87	11	9	63
2	7	14	51	2	1,75	12	10	57
3	11	15	55	3	2,63	13	11	39
4	14	16	58	4	3,50	14	12	26
5	18	17	62	5	4,38	15	13	14
6	22	18	66	6	5,25	16	14	01
7	25	19	69	7	6,15	17	14	89
8	29	20	73	8	7,01	18	15	76
9	33	21	76	9	7,88	19	16	64
10	36	22	80	10	8,76	20	17	52
11	40	23	84					
12	44							

## Newman Comments and observations

Fineness of British & Portuguese Gold is slightly greater than French and Spanish Gold

gr and g represent grains  
ct and c represent cent  
dL, dol, dl represent dollar  
pwt represents pennyweight  
the comma is used between dollars and cents only  
in the first table perhaps because of crowded spacing  
Lettering and figures are typeset in label,

Must have been made after 1792 U.S. Mint Act.  
Probably made about 1795 because U.S. gold coin began in 1795 and its weight is not included in the table.



Weights from 1793 scale

6 drach (1)	9.30	1.55 gmm per drach
5 drach (3)	9.72 out same	1.545
3 drach (3)	4.67	1.56
2 drach (4)	3.08	1.54
1 drach (3)	1.53	1.53

Pharm 2.59 drg =

Pharm 1.95 gm =



1838?

I am almost sure I have ~~an~~ <sup>scale</sup> unknown item, it being the first to use the U.S. Federal coinage system to check the value of the foreign gold coin ~~in~~ <sup>circulating</sup> in the U.S. during the wait for <sup>U.S.</sup> gold coinage immediately after the U.S. Mint was created <sup>in 1793</sup>. The first ~~of~~ <sup>many further</sup> US gold was dated 1795 and there were ~~years~~ <sup>years</sup> of delay before there was sufficient US gold coin in circulation ~~because~~ <sup>because</sup> U.S. stopped making \$10 gold denominations in 1804 <sup>(until 1834)</sup> and ~~came~~ <sup>modest amount</sup> only ~~of~~ <sup>the first</sup> lower denominations until 1834.

~~Have you~~  
The same <sup>English</sup> type fonts <sup>used in England</sup> were available in America in 1793.

~~Any~~ When you read the full text of the article (with pictures) ~~you may~~ I hope you will make further editorial suggestions.

Your wonder why so few <sup>early</sup> American coins <sup>scale</sup> summed is that merchants ~~books~~ <sup>books</sup> were used for larger transactions whether <sup>Spanish-American</sup> or sterling but there was plenty of silver coin and plenty of <sup>miscellaneous</sup> copper to take care of ~~people's~~ <sup>people's</sup> routine needs.

I am sorry Eugene Mahoney is no longer able to be helpful.

lost all weights

The <sup>five</sup> different colonies <sup>groups</sup> valued silver on a ~~different~~ <sup>different</sup> basis ~~which~~ <sup>which</sup> ~~changed~~ <sup>commonly</sup> before the revolution ~~and this~~ <sup>but</sup> ~~proge~~ <sup>and</sup> ~~was~~ <sup>used</sup> after independence until 1815



The earliest coin scales identifiable as being used in <sup>the</sup> American Colonies seem to be those prepared for the Massachusetts Bay legislation under the Act of 1749/50 in which stabilization of the Money of Account was ~~the~~ <sup>at 4 shillings lawful money to the Spanish dollar</sup> ~~accomplished~~ occurred. ~~and~~ ~~old Tenor was previous~~ and prior money of account was <sup>thereby</sup> redeemed at 7  $\frac{1}{2}$  for 1 and referred to as Old Tenor for the transition. (See <sup>the</sup> Early Paper Money of America, p. ). Scales for weighing Foreign coin ~~express~~ and converting their values into both lawful money and Old Tenor ~~and~~ ~~the~~ ~~table~~ on table on the underside of the box lid. Some had the names of the seller such as R. Billings, <sup>Henry</sup> Chebbois, Jonathan Dohin, all of Boston.

Samuel Hall's Sheppard others

There are some with similar markings but no identification only <sup>the</sup> Jonathan Dohin ~~table~~ ~~states~~ that he made scales and weights

No other scale box tables are <sup>recorded</sup> ~~mentioned~~ until ~~A table in~~ after the end of the 18th Century when <sup>tables</sup> ~~of~~ two Philadelphia Scale Sellers are

printed tables.

Welcom Poyntell and Joseph Richardson  
<sup>Stirling</sup> Phila Penna only  
NY

foreign coin. There must have been many imported scales & weights with no American with an American identification. Richardson <sup>is known to have</sup> imported his scales from England and presumably that was the primary source.

In the last half of the 18th Century American almanacs ~~was~~ <sup>often</sup> printed a table of the weight and value of foreign coin in <sup>one or two</sup> specific ~~places~~ <sup>the use of</sup> money of account areas so ~~that the~~ <sup>use of</sup> pocket ~~scale~~ <sup>scale</sup> ~~was~~ <sup>was</sup> ~~table~~ <sup>table</sup> common practice



the customary use for <sup>early</sup> ~~such a~~ <sup>an 18<sup>th</sup> century</sup> pocket balance in England was to <sup>test one</sup> ~~weigh~~ coins ~~at a time~~ by ~~using~~ <sup>balancing</sup> it with a <sup>brass</sup> coin weight usually ~~containing~~ <sup>an</sup> image of the or designation of ~~the~~ a specific domestic or foreign coin. If the coin being tested did not show sufficient weight the coin was refused. ~~There was no attempt~~ <sup>in the 18<sup>th</sup> century when self-regulating scales were developed they added a means of determining the coin</sup> to ~~ascertain~~ the weight deficiency or whether it was counterfeit. ~~Being~~ The weight of the coin being tested was therefore not ascertained under such practices. ~~if a coin weighed less than a pennyweight a series of weights~~ Pennyweights and grain weights were ~~used for~~ <sup>not</sup> When the ~~weight~~ <sup>in pennyweights or grains</sup> was desired then actual weight was desired ~~the~~ in pennyweight and grains then

The gold coins ~~permitted~~ <sup>to be weighed</sup> according to the label indicate that such coins were often short weights by being clipped, filed or otherwise abused.

The importer buying his <sup>pocket</sup> scale boxes or balances from England had to adapt them for his customers by putting in a label. In the 1<sup>st</sup> ~~Massachusetts~~ <sup>Massachusetts</sup> stabilization of its money of account in 1749/50 with 6 shilling for one Spanish dollar ~~Labels were~~ attached to the underside of the lid of ~~the~~ <sup>each</sup> scale ~~box~~ <sup>each</sup> boxes showing the ~~weight~~ <sup>weight</sup> of the coins themselves in lawful money of 6 sh to the Span dol.. These ~~labels~~ were printed in America, some with the sellers name and some not. Sellers such as ~~W~~ <sup>W</sup> X V Z are known from that period. ~~In the~~ After the Amer Rev English made ~~the~~ <sup>the</sup> pocket scale boxes ~~and~~ <sup>had</sup> Pennsylvania and ~~New~~ <sup>New</sup> York ~~money~~ <sup>money</sup> of account printed on their labels and Poyntell and John S had their names printed on the labels.



# Dollars & Cents Balance

## 18. Weights -

3 @ 1 dwt  
4 @ 2 dwt  
3 @ 3 dwt  
~~1 @ 4 dwt~~  
5 @ 5 dwt  
1 @ 6 dwt

(Hairs  
not checked  
for  
actual  
weight)

3 scruples  
00 pharm

Pans 42mm diam

Beam 111mm

Slotted Circular beam end suspenders 9mm diam

Box width 148mm

depth 58mm

height 24mm incl lid 4mm

Curved left and right ends of box and lid

Border embossed with <sup>multiple identical</sup> floral design 17mm x 6mm per unit

~~Units with outside~~ positioning lines for unit ~~embossment~~

Rectangular placement

of units front to back and ~~two~~ separate individual units in center left and center right

Interior of box <sup>applied out</sup> for center <sup>drop in</sup> placement of pans, <sup>cut out</sup> ~~and~~ for beam and pointer insertion toward hinge. ~~left and right ends~~

of left and right weight openings. ~~Separate~~ left side and right side ~~open~~ weight opening with semi circular outside ~~for~~ shape and inside shape conforming to balance and pan opening.

Remnants of Dark ~~blue~~ paper lining in each opening

The pasted in printed table is ~~9mm~~ <sup>wide</sup> 5.5mm high divided by a center line into two separate <sup>portions each</sup> with caption above and <sup>each</sup> two vertical <sup>columns</sup> ~~below~~ <sup>Each section</sup> has 9 columns of figures. ~~the right table has~~ Each table has <sup>a total of 12 integral</sup> grain weights and <sup>integral</sup> 10 pennyweight the right upright clasp link passes through the upper right corner of the table and the lid above it.



In that period many <sup>American</sup> almanacs were published annually, and <sup>often</sup> included money values of foreign coin. The heading on ~~A~~ Astronomical ~~Diary~~ <sup>Diary</sup>, Calendar, or Almanack for the Year of Our Lord 1794 <sup>(which just refers to)</sup> the standards of the Act of February 9, ~~1793~~ 1793 and ~~provides~~ has its ~~table~~ <sup>table</sup> divided into two portions, the left for coin of Great Britain and Portugal and the right for coinage of France and Spain. ~~At the top of~~ <sup>At the top of</sup> each side is a text, just as in the table on the scale box lid. The ~~abbreviations of the weights~~ <sup>columns for the</sup> numbers ~~are separated by lines, and by others by spaces.~~ <sup>are separated by lines, and by others by spaces.</sup> The abbreviations are ~~divts, grains, etc.~~ <sup>divts, grains, etc.</sup> with grains not being abbreviation. The ~~integral weights~~ <sup>run up to</sup> to 24 ~~divts~~ <sup>divts</sup> and to 24 grains. The values are exactly the same as on the table on the underside of the scale box lid. ~~Each complies in full with the February 9, 1793 Act.~~ <sup>Each complies in full with the February 9, 1793 Act.</sup> There are no denominations of ~~coinage~~ <sup>coinage</sup> or popular names for coins ~~included~~.

There is so much similarity between ~~the~~ <sup>the</sup> ~~content and layout~~ <sup>content and layout</sup> of the ~~table on the scale box and the table in the~~ <sup>table on the scale box and the table in the</sup> almanac that they ~~are both of the same~~ <sup>must</sup> be from ~~the same period~~ <sup>the same period</sup>. ~~The almanac for 1794~~ <sup>Any almanac for 1794</sup> would have ~~been~~ <sup>been</sup> prepared in late 1793. The ~~table on the scale box had to~~ <sup>table on the scale box had to</sup> ~~would only be soluble for 3 years until legal~~ <sup>would only be soluble for 3 years until legal</sup>.

Other almanacs have similar data for 1794 and

3 grain limit on legal tender

tender terminated as they could not know what the legal tender provisions would have to be extended for 3 more similar provisions

a sufficient quantity of U.S. mint coinage.



The scale had 18 <sup>brass</sup> weights, ~~16~~ of which were ~~marked~~ marked in pennyweights, 3 at 1 dwt, 4 at 2 dwt, 3 at 3 dwt, ~~the 16 weights~~ 5 at 5 dwt and 1 at 6 dwt. There were also 2 pharmaceutical weights, ~~the pennyweights~~ <sup>marked</sup> the amount of weight was marked by <sup>the same number of</sup> circular punched ~~an~~ impression ~~in the~~ into one ~~side~~ <sup>side</sup> of the weight, ~~with a~~ with a hallmark. Small verification mark of a ~~the full silver~~ ~~horse facing left on~~ full body of a standing horse facing left in an incuse rectangular field with rounded corners. This ~~appears~~ is a London verification mark. The weights are therefore English. ~~the full silver~~ ~~into the weight~~ <sup>into the weight</sup> pens to a great extent and are held on the ~~top~~ <sup>top</sup> when the <sup>top</sup> lid is closed.

~~The difference between the two types of~~  
Gold coins under the <sup>July 9, 1793</sup> law ~~was 1.46%~~  
depending on which is compared  
in favor of the ~~Great Britain~~ British and Portuguese  
gold coin ~~of 1.46% to 1.48%~~ <sup>of 1.46% to 1.48%</sup> depending on the ~~which~~  
has a greater value ~~than~~ the French and Spanish  
gold coin of equal weight ~~of 1.48%~~ <sup>of 1.48%</sup>.

The British + Portuguese gold coin under the  
July 9, 1793 law had a ~~1.46%~~ 1.48% greater value  
than the French and Spanish gold coin of the  
same weight ~~due to~~ <sup>due to</sup> difference in gold fineness.



The embossed decoration on the scale box <sup>top</sup> ~~is~~  
~~of English origin~~ <sup>Seals</sup>  
was often used in England ~~for~~ <sup>for</sup> ~~the~~ <sup>for</sup> ~~the~~  
~~on~~ scales used there. It was <sup>often</sup> applied ~~with~~  
<sup>within</sup> ~~of~~ <sup>to apply</sup> ~~the~~ <sup>odometer</sup>  
~~of~~ <sup>the</sup> marked line scratch into the  
wood. ~~It~~ Although it was small it ~~was~~ <sup>was</sup> ~~designed~~  
was repeated to complete the ornamentation.

~~the tropical forest~~[illegible]

There were a substantial number of  
~~dated~~ <sup>printed</sup> ~~exchange~~ ~~charts~~ ~~tables~~ and  
pamphlets for the values of foreign  
coins during the 1793-1815 period. There  
must have been a variety of counter <sup>coin</sup> ~~reels~~  
and pocket <sup>coin</sup> ~~reels~~ in use at that time.

The use of pennymweights and grain weights was thus avoided ~~and the testing~~ by use of this type of pocket scale.



legal tender status of foreign gold coin.  
 The foreign of the <sup>non</sup> foreign coins was a temporary  
 expedient and ~~and~~ it was not then  
 realized that <sup>there were</sup> ~~there were~~ 3 year extensions would be  
 forthcoming ~~and~~ until April 10, 1809.

98	01	6	3	1
00	03	09	6	3

98	02	06
02	06	09



Financial

p. 184

Ment makes assays of  
France England Spain + Portugal

(both gold & silver) 1/8/93

in pursuance of resolution of Congr  
Nov 29. 1792



Isaiah ~~Isaiah~~ Thomas 1794 Worcester  
1794 Almanac

Great Britain & Portugal according to the  
Congress regulating foreign coins, Calculated  
for the use of the Bank of the United States.

Drains 1 to ~~24~~ 24

Dut 1 to 100 ~~24~~

much larger spread.

France & Spain ~~24~~ run from

Drains 1 to 24

Dut 1 to 50

~~\$ 20/11~~  
Act of Feb ~~1~~<sup>9</sup>, 1793

sect ~~1~~<sup>1</sup> After July 1, 1793 foreign gold & silver

be legal tender at following rates

gold of Great Britain & Portugal 100 cents for  
for every 27 grains <sup>of the actual weight</sup> of their present standard

for gold of France Spain & dominions of Spain  
for every 27 grains +  $\frac{2}{5}$  th

~~for gold coins of France~~

Spanish milled Dollars at 100 cents for each dollar

sect 2

3 years after commencement of coinage of gold &  
silver at US mint and after announcement all  
foreign gold & silver coins except Spanish milled  
dollars and their fractions shall cease

Proclamation

John Adams

Oct 15, 1794

July 31, 1795

cease July 31, 1798

Act of Feb 1, 1798. Sect 2 of 2/8/93 repeated  
3 more years from Jan 1, 1798 ~~this~~<sup>to gold</sup> session of congress thereafter

No action  
in between

Act of Apr 10, 1806

sect 1 of 2/3/93 revised slightly.  
section 2 of 2/3/93 suspended for 3 years from April 10, 1806.

1070011  
4



1797 New England Almanac

English + Portuguese 400 Funt + Spanish 200

grains 1 to ~~12~~ 12

dwt + grain conversion

103

designed ~~for~~ calculation  
from  $\text{d} \text{ \& } \text{q}$  into gold

coin weight

Totally impractical

Same ~~up~~ to 13 grains (13)  $\phi$  48  $\phi$  47  
 except for error at 10 grains

37 36

error at 14g + 15g same at 51 51  
 55 55

16 gr. 59 58

and 1 $\phi$  <sup>2</sup> differential from there on up.

dwt starts

	89	87	2
	178	175	3
	267	263	4
	355	350	5
	444	438	6
	533	525	8
7	622	613	<del>9</del>
	711	701	10
	800	788	12
	889	876	13
	978	963	15
	1067	1051	16
	1155	1139	16
	1244	1226	18
	1333	1314	19
	1422	1401	21
	1511	1489	22
	1600	1576	24
	1689	1664	25
	1778	1752	26

178  $\sqrt{30000}$   
 78  
 1220  
 1248  
 355  $\sqrt{500}$   
 355  
 1450

1067  $\sqrt{16000}$   
 1067  
 5330  
 peculiar possible

1511  $\sqrt{220000}$   
 1511  
 6890  
 6044  
 7600

146%  
 274  $\sqrt{40000}$   
 274  
 1260  
 1096  
 1640  
 1664

180%  
 270  $\sqrt{40000}$   
 270  
 1300  
 1080  
 200

141  
 355  $\sqrt{50000}$   
 355  
 1450  
 1420  
 300

error 11  
 622  $\sqrt{70000}$   
 622  
 7380  
 422  
 978  $\sqrt{150000}$   
 978  
 5220

1.50  
 1333  $\sqrt{190000}$   
 1333  
 5670  
 5332  
 3380  
 1.4

1778  $\sqrt{260000}$   
 1778  
 8220  
 8890



Length  $5\frac{13}{16}$ "  $\times$   $2\frac{5}{16}$ " width  $1\frac{5}{16}$ "  
 wire hinges

frontal plate  $3\frac{1}{2}$ " wide by  $2\frac{1}{8}$ "

frontwood  $\left[ \begin{array}{l} \text{embossment} \\ 21/32" \times 1/4" \\ \text{in rectangle on} \\ \text{lid with 2} \end{array} \right]$  in

~~central~~ central pillars  
~~and a~~ ch.

~~Loops for the top clasps~~ ~~on the lid~~ ~~Swans~~ ~~Swans~~ horizontally  
 to catch a loop extending up ~~from the~~ from the ~~bottom~~ lower portion  
 through a hole in the lid

~~The~~ Diameter of area for holding pens  $2\frac{1}{16}$ "

~~The~~ Blue gray paper liner on ~~the~~ bottom of scale compartment  
 and on each weight pen. Pens are shaped like a D  
 and left pen a mirror image.

~~Beam~~ <sup>symmetrical</sup> leaf shaped cross section with hidden swan neck cl  
 close to each end  
 hidden by cylindrical dust caps  $5/16$ " diameter  $2\frac{1}{16}$ " wide <sup>near each end</sup> hollowed out internal  
 from the bottom ~~and~~ forced over a swan neck band ~~near~~ ~~end of the beam~~

Dust cap has ~~horizontal~~ <sup>knife pushed</sup> ~~pin~~ <sup>through</sup> center ~~to~~ <sup>envelop</sup> ~~the~~ <sup>pin</sup>  
~~and~~ ~~pin~~ ~~figure 8~~ ~~link~~ ~~is~~ ~~inserted~~ ~~pin~~ ~~to the~~ ~~for~~ ~~other~~ ~~side~~  
 and passes through a figure 8 ~~link~~ ~~to~~ ~~hold~~ the pen suspension ~~to~~  
 the knife pin which is protected by the  
 dust cap from ~~any~~ damage  
 or interference.

There are no tops for the pens, the weights being held in by  
 the lid

grain weights from 1 to 23 on both <sup>sides of table</sup> ~~tables~~  
pennyweight from 1 to ~~17~~ 17 were on the tables  
this was sufficient to cover the weight of ~~all~~ any  
gold coins issued by the ~~designated~~ named foreign  
countries: and was translated ~~into dollars~~ \$ & ¢

Pennyweight was abbreviated cwt rather than deut or Dwt.  
Cent is abbreviated by both C and ct  
dollars abbreviated by both dol and dl

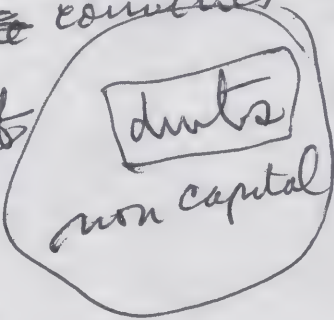


~~Physically mentions Act~~  
~~Identical values~~

~~Identical Act~~ Act of ~~Feb 9~~  
93

Layout

~~Top box~~ Divided in half  
Position of  
~~same~~ countries in same point

~~But~~  instead of ~~part~~  
part

---

Sarah Thomas 1794

Calculated for use of Bank of  
US

different layout

Capital Dwt

Amer State Papers p 96 & 97

On the Establishment of a Mint

by Alexander Hamilton, Secy of Treasury

Jan 28. 1791

He uses per cent several times but  
this is per centum

He uses for copper coins the  
word cent and half cent  
on several occasions

"The word cent, being in use in various  
transactions and in instruments, will  
without <sup>much</sup> difficulty be understood as the  
hundredth, and the half cent, of course, as  
the two-hundredth part."

Jefferson's <sup>undated</sup> Notes on p 105  
do not use the word  
CENT These are on  
answer to the Morris Report.



The word "Cent" was not used in the denominations proposed under the Robert Morris plan of January 15, 1782 and its subsequent modifications. When Congress on July 6, 1785 resolved that the money unit of the United States be the dollar, ~~the word~~ <sup>with respect to the plan for the</sup> word "Cent" was not used ~~for~~ <sup>in the</sup> copper coinage. On August 8, 1786 <sup>the</sup> Congress proposed the cent as a denomination, providing for "25 <sup>copper</sup> pounds avoirdupois to equal 100 cents." State franchised coppers under an October 16, 1786 provision allowed to pass at the rate of one cent per 157 1/2 grains.

Dollars, &c., shall be legal tenders, &c.

Weight of gold coins.

Eagles, &c., shall be a legal tender, &c.

Silver coins heretofore issued, and gold coins issued since 31st July, 1834, shall continue to be legal tenders.

Weight of copper coins.

Proportional value of a dollar.

Devices and legends of coins.

Gold and silver bullion brought for coinage shall be received and coined.

Proviso. Further proviso.

Receipt to be given for bullion.

Proviso.

Bullion deposited for coinage to be assayed.

Assayer to report the quality, &c.

Charges to which the depositor is subjected.

And that dollars, half dollars, and quarter dollars, dimes, and half dimes, shall be legal tenders of payment, according to their nominal value, for any sums whatever.

SEC. 10. *And be it further enacted*, That of the gold coins, the weight of the eagle shall be two hundred and fifty-eight grains; that of the half eagle one hundred and twenty-nine grains; and that of the quarter eagle sixty-four and one-half grains. And that for all sums whatever, the eagle shall be a legal tender of payment for ten dollars; the half eagle for five dollars; and the quarter eagle for two and a half dollars.

SEC. 11. *And be it further enacted*, That the silver coins heretofore issued at the mint of the United States, and the gold coins issued since the thirty-first day of July, one thousand eight hundred and thirty-four, shall continue to be legal tenders of payment for their nominal values, on the same terms as if they were of the coinage provided for by this act.

SEC. 12. *And be it further enacted*, That of the copper coins, the weight of the cent shall be one hundred and sixty-eight grains, and the weight of the half-cent eighty-four grains. And the cent shall be considered of the value of one hundredth part of a dollar, and the half-cent of the value of one two-hundredth part of a dollar.

SEC. 13. *And be it further enacted*, That upon the coins struck at the mint there shall be the following devices and legends: upon one side of each of said coins there shall be an impression emblematic of liberty, with an inscription of the word LIBERTY, and the year of the coinage; and upon the reverse of each of the gold and silver coins, there shall be the figure or representation of an eagle, with the inscription United States of America, and a designation of the value of the coin; but on the reverse of the dime and half dime, cent and half cent, the figure of the eagle shall be omitted.

SEC. 14. *And be it further enacted*, That gold and silver bullion brought to the mint for coinage, shall be received and coined, by the proper officers, for the benefit of the depositor: *Provided*, That it shall be lawful to refuse, at the mint, any deposit of less value than one hundred dollars, and any bullion so base as to be unsuitable for the operations of the mint; *And provided also*, That when gold and silver are combined, if either of these metals be in such small proportion that it cannot be separated advantageously, no allowance shall be made to the depositor for the value of such metal.

SEC. 15. *And be it further enacted*, That when bullion is brought to the mint for coinage, it shall be weighed by the treasurer, in the presence of the depositor, when practicable, and a receipt given which shall state the description and weight of the bullion: *Provided*, That when the bullion is in such a state as to require melting before its value can be ascertained, the weight after melting shall be considered as the true weight of the bullion deposited.

SEC. 16. *And be it further enacted*, That from every parcel of bullion deposited for coinage, the treasurer shall deliver to the assayer a sufficient portion for the purpose of being assayed; but all such bullion remaining from the operations of the assay shall be returned to the treasurer by the assayer.

SEC. 17. *And be it further enacted*, That the assayer shall report to the treasurer the quality or standard of the bullion assayed by him; and he shall also communicate to the treasurer such information as will enable him to estimate the amount of the charges hereinafter provided for, to be made to the depositor, for the expenses of converting the bullion into standard metal fit for coinage.

SEC. 18. *And be it further enacted*, That the only subjects of charge by the mint to the depositor shall be the following: For refining when

Same int  
as  
Mint  
Act



which may hereafter be directed and established by the accounting officers of the treasury, and to reduce the same into bars or ingots fit for the rolling mills, and then to deliver them to the coiner or treasurer, as the director shall judge expedient; and to do and perform all other duties belonging to the office of a melter and refiner or which shall be ordered by the director of the mint.

To take oath and give security.

SEC. 2. *And be it further enacted*, That the melter and refiner of the said mint shall, before he enters upon the execution of his said office, take an oath or affirmation before some judge of the United States, faithfully and diligently to perform the duties thereof. And also shall become bound to the United States of America, with one or more sureties to the satisfaction of the Secretary of the Treasury, in the sum of six thousand dollars, with condition for the faithful and diligent performance of the several duties of his office.

His compensation.

SEC. 3. *And be it further enacted*, That there shall be allowed and paid, to the said melter and refiner of the mint as a compensation for his services, the yearly salary of fifteen hundred dollars.

Obsolete.

President may make temporary appointment.

SEC. 4. *And be it further enacted*, That the director of the mint be, and hereby is authorized, with the approbation of the President of the United States, to employ such person as he may judge suitable to discharge the duties of the melter and refiner, until a melter and refiner shall be appointed by the President, by and with the advice of the Senate.

1800, ch. 34.

Treasurer of the mint to retain part of bullion deposited, &c.

SEC. 5. *And be it further enacted*, That the treasurer of the mint shall, and he is hereby directed, to retain two cents per ounce from every deposit of silver bullion below the standard of the United States, which hereafter shall be made for the purpose of refining and coining; and four cents per ounce from every deposit of gold bullion made as aforesaid, below the standard of the United States, unless the same shall be so far below the standard as to require the operation of the test, in which case, the treasurer shall retain six cents per ounce, which sum so retained shall be accounted for by the said treasurer with the treasury of the United States as a compensation for melting and refining the same.

Treasurer of the mint shall not be obliged to receive certain deposits of bullion.

SEC. 6. *And be it further enacted*, That the treasurer of the mint shall not be obliged to receive from any person, for the purpose of refining and coining, any deposit of silver bullion, below the standard of the United States, in a smaller quantity than two hundred ounces; nor a like deposit of gold bullion below the said standard, in a smaller quantity than twenty ounces.

Officers of the mint may give a preference to bullion of the standard of the U. S.

SEC. 7. *And be it further enacted*, That from and after the passing of this act, it shall and may be lawful for the officers of the mint to give a preference to silver or gold bullion, deposited for coinage, which shall be of the standard of the United States, so far as respects the coining of the same, although bullion below the standard, and not yet refined, may have been deposited for coinage, previous thereto, any law to the contrary notwithstanding: *Provided*, That nothing herein shall justify the officers of the mint, or any one of them, in unnecessarily delaying the refining any silver or gold bullion below the standard, that may be deposited, as aforesaid.

1792, ch. 16, sec. 15.

President may reduce the weight of copper coin.

SEC. 8. *And be it further enacted*, That the President of the United States be, and he is hereby authorized, whenever he shall think it for the benefit of the United States, to reduce the weight of the copper coin of the United States: *Provided*, such reduction shall not, in the whole, exceed two pennyweights in each cent, and in the like proportion in a half cent; of which he shall give notice by proclamation, and communicate the same to the then next session of Congress.

SEC. 9. *And be it further enacted*, That it shall be the duty of the treasurer of the United States, from time to time, as often as he shall receive copper cents and half cents from the treasurer of the mint, to

for the said mint, the President be authorized, and he is hereby authorized to cause to be provided and put in proper condition such buildings, and in such manner as shall appear to him requisite for the purpose of carrying on the business of the said mint; and that as well the expenses which shall have been incurred pursuant to the said resolution as those which may be incurred in providing and preparing the said buildings, and all other expenses which may hereafter accrue for the maintenance and support of the said mint, and in carrying on the business thereof, over and above the sums which may be received by reason of the rate per centum for coinage herein after mentioned, shall be defrayed from the treasury of the United States, out of any monies which from time to time shall be therein, not otherwise appropriated.

expense how to  
be defrayed.

Species of the  
coins to be  
struck.

Eagles.

Half Eagles.

Quarter Eagles.

Dollars or  
Units.

Half Dollars.

Quarter Dol-  
la s.

Dismes.

Half Dismes.

Cents.

Half Cents.  
Act of May 8,  
1792.

Of what de-  
vices.

SEC. 9. *And be it further enacted*, That there shall be from time to time struck and coined at the said mint, coins of gold, silver, and copper, of the following denominations, values and descriptions, viz. EAGLES—each to be of the value of ten dollars or units, and to contain two hundred and forty-seven grains and four eighths of a grain of pure, or two hundred and seventy grains of standard gold. HALF EAGLES—each to be of the value of five dollars, and to contain one hundred and twenty-three grains and six eighths of a grain of pure, or one hundred and thirty-five grains of standard gold. QUARTER EAGLES—each to be of the value of two dollars and a half dollar, and to contain sixty-one grains and seven eighths of a grain of pure, or sixty-seven grains and four eighths of a grain of standard gold. DOLLARS or UNITS—each to be of the value of a Spanish milled dollar as the same is now current, and to contain three hundred and seventy-one grains and four sixteenth parts of a grain of pure, or four hundred and sixteen grains of standard silver. HALF DOLLARS—each to be of half the value of the dollar or unit, and to contain one hundred and eighty-five grains and ten sixteenth parts of a grain of pure, or two hundred and eight grains of standard silver. QUARTER DOLLARS—each to be of one fourth the value of the dollar or unit, and to contain ninety-two grains and thirteen sixteenth parts of a grain of pure, or one hundred and four grains of standard silver. DISMES—each to be of the value of one tenth of a dollar or unit, and to contain thirty-seven grains and two sixteenth parts of a grain of pure, or forty-one grains and three fifth parts of a grain of standard silver. HALF DISMES—each to be of the value of one twentieth of a dollar, and to contain eighteen grains and nine sixteenth parts of a grain of pure, or twenty grains and four fifth parts of a grain of standard silver. CENTS—each to be of the value of the one hundredth part of a dollar, and to contain eleven penny-weights of copper. HALF CENTS—each to be of the value of half a cent, and to contain five penny-weights and half a penny-weight of copper. (a)

SEC. 10. *And be it further enacted*, That, upon the said coins respectively, there shall be the following devices and legends, namely: Upon one side of each of the said coins there shall be an impression emblematic of liberty, with an inscription of the word Liberty, and the year of the coinage; and upon the reverse of each of the gold and silver coins there shall be the figure or representation of an eagle, with this inscription, "UNITED STATES OF AMERICA" and upon the reverse of each of the copper coins, there shall be an inscription which shall express the denomination of the piece, namely, cent or half cent, as the case may require.

SEC. 11. *And be it further enacted*, That the proportional value of gold to silver in all coins which shall by law be current as money within

(a) The acts regulating the gold and silver coins of the United States, are: An act establishing a mint and regulating the coins of the United States, April 2, 1792, chap. 16, sec. 9; an act concerning the gold coins of the United States, and for other purposes, June 28, 1834, chap. 9; an act supplementary to the act entitled, "An act to establish a mint, and regulating the coins of the United States, January 18, 1837, chap. 3, sec. 8, 9, 10.

Normal  
1792  
Mint  
Act

vol 1



penalty on giving undue preference, &c.  
Act of March 3, 1795, ch. 86.

the said bullion shall have been brought or delivered, giving priority according to priority of delivery only, and without preference to any person or persons; and if any preference shall be given contrary to the direction aforesaid, the officer by whom such undue preference shall be given, shall in each case forfeit and pay one thousand dollars; to be recovered with costs of suit. And to the end that it may be known if such preference shall at any time be given, the assayer or officer to whom the said bullion shall be delivered to be coined, shall give to the person or persons bringing the same, a memorandum in writing under his hand, denoting the weight, fineness and value thereof, together with the day and order of its delivery into the mint.

Coins made a lawful tender,

SEC. 16. *And be it further enacted*, That all the gold and silver coins which shall have been struck at, and issued from the said mint, shall be a lawful tender in all payments whatsoever, those of full weight according to the respective values herein before declared, and those of less than full weight at values proportional to their respective weights.

and to be made conformable to the standard weights, &c.

SEC. 17. *And be it further enacted*, That it shall be the duty of the respective officers of the said mint, carefully and faithfully to use their best endeavours that all the gold and silver coins which shall be struck at the said mint shall be, as nearly as may be, conformable to the several standards and weights aforesaid, and that the copper whereof the cents and half cents aforesaid may be composed, shall be of good quality.

The Treasurer to reserve not less than three pieces of each coin to be assayed;

SEC. 18. And the better to secure a due conformity of the said gold and silver coins to their respective standards, *Be it further enacted*, That from every separate mass of standard gold or silver, which shall be made into coins at the said mint, there shall be taken, set apart by the treasurer and reserved in his custody a certain number of pieces, not less than three, and that once in every year the pieces so set apart and reserved, shall be assayed under the inspection of the Chief Justice of the United States, the Secretary and Comptroller of the Treasury, the Secretary for the department of State, and the Attorney General of the United States, (who are hereby required to attend for that purpose at the said mint, on the last Monday in July in each year,) or under the inspection of any three of them, in such manner as they or a majority of them shall direct, and in the presence of the director, assayer and chief coiner of the said mint; and if it shall be found that the gold and silver so assayed, shall not be inferior to their respective standards herein before declared more than one part in one hundred and forty-four parts, the officer or officers of the said mint whom it may concern shall be held excusable; but if any greater inferiority shall appear, it shall be certified to the President of the United States, and the said officer or officers shall be deemed disqualified to hold their respective offices.

when and by whom, &c.

Penalty on debasing the coins.

SEC. 19. *And be it further enacted*, That if any of the gold or silver coins which shall be struck or coined at the said mint shall be debased or made worse as to the proportion of fine gold or fine silver therein contained, or shall be of less weight or value than the same ought to be pursuant to the directions of this act, through the default or with the connivance of any of the officers or persons who shall be employed at the said mint, for the purpose of profit or gain, or otherwise with a fraudulent intent, and if any of the said officers or persons shall embezzle any of the metals which shall at any time be committed to their charge for the purpose of being coined, or any of the coins which shall be struck or coined at the said mint, every such officer or person who shall commit any or either of the said offences, shall be deemed guilty of felony, and shall suffer death.

Money of account to be expressed in dollars, &c.

SEC. 20. *And be it further enacted*, That the money of account of the United States shall be expressed in dollars or units, dismes or tenths, cents or hundredths, and milles or thousandths, a disme being the tenth part of a dollar, a cent the hundredth part of a dollar, a mille the thou-

Normal  
Mint  
Act

Vol. I

may be sued for, prosecuted and recovered, in such courts, and be disposed of in such manner, as any penalties and forfeitures which may be incurred for offences against the act, intituled "An act to provide more effectually for the collection of the duties imposed by law on goods, wares and merchandise, imported into the United States, and on the tonnage of ships or vessels," may legally be sued for, prosecuted, recovered and disposed of: *Provided always*, That if any officer entitled to a part or share of any such penalty or forfeiture, shall be necessary as a witness, on the trial for such penalty or forfeiture, such officer may be a witness upon the said trial; but in such case, he shall not receive, nor be entitled to any part or share of the said penalty or forfeiture; and the part or share, to which he would otherwise have been entitled, shall accrue to the United States.

SEC. 30. *And be it further enacted*, That from and after the last day of March next, this act shall be in full force and effect; and so much of the act, intituled "An act for registering and clearing vessels, regulating the coasting trade, and for other purposes," as comes within the purview of this act, shall, after the said last day of March, be repealed.

APPROVED, December 31, 1792.

Penalties how recovered and disposed of.  
1790, ch. 35.

When this act shall take effect, &c.  
Repealed 1789, ch. 11.

STATUTE II.

CHAP. II.—*An Act to amend an act intituled "An act establishing a Mint, and regulating the coins of the United States," so far as respects the coinage of copper.*

Jan. 14, 1793.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That every cent shall contain two hundred and eight grains of copper, and every half cent shall contain one hundred and four grains of copper; and that so much of the act, intituled "An act establishing a mint, and regulating the coins of the United States," as respects the weight of cents and half cents, shall be, and the same is hereby repealed.

APPROVED, January 14, 1793.

Act of April 2, 1792, ch. 16.  
Contents of cents and half cents.

*Adjustment  
of  
content of  
Cent.*

STATUTE II.

CHAP. III.—*An Act to provide for the allowance of interest on the sum ordered to be paid by the resolve of Congress, of the twenty-eighth of September, one thousand seven hundred and eighty-five, as an indemnity to the Persons therein named.*

Jan. 14, 1793.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That lawful interest, from the sixteenth day of May, in the year one thousand seven hundred and seventy-six, shall be allowed on the sum of two hundred dollars, ordered to be paid to Return Jonathan Meigs, and the legal representative of Christopher Greene, deceased, by a Resolve of the United States in Congress assembled, of the twenty-eighth day of September, in the year one thousand seven hundred and eighty-five.

APPROVED, January 14, 1793.

STATUTE II.

CHAP. IV.—*An Act to continue in force for a limited time, and to amend the act intituled "An act providing the means of intercourse between the United States and foreign nations."*

Feb. 9, 1793.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the act, intituled "An act providing the means of intercourse between the United States and foreign nations," which would expire at the end of the present session of Congress, be, and the same hereby is, together

Act providing intercourse with foreign nations continued.  
July 1, 1790, ch. 22.  
1796, ch. 41.



Corrected May 2000 by EPN

# Old Tenor-New Tenor-Again

BY E P MAHONEY

A long-standing error may now be corrected. In their classic 1923 work *Money Scales and Weights*,<sup>1</sup> Sheppard and Musham described a coin scale-box having a *rectangular tapering balance beam decorated in three incised lines on each link [arm] and canted upper edges*. The rectangular oak case had two pens for weights; the weights were missing. Inside was a label that identified the seller as *Lewis Deblois at ye Golden Eagle dock Lo[ndon]* and listed the weights and values of all the coins in use at that time, which they believed to be 1740. But the values were listed for 15 coins in Old Tenor and Full Lawfull [money], and bullion weights were defined in ~~Gold~~ <sup>for Gold and Silver</sup> Old Tenor, and ~~Silver~~ Old Tenor. Clearly these were not English coins or currency. Why would a London merchant sell a scale with such a label?

In his informative article *Old Tenor*<sup>2</sup> the late George Mallis describes his good fortune in acquiring an apparently identical scale having weights inscribed with the 'lion passant' assay mark of Goldsmiths Hall in London. The table of contemporary weights was identical to that in Sheppard and Musham except that the name of the seller was R Billings in Cornhill, Bofton (the old-fashioned long *s* is often mistaken for an *f*.)

During a visit to the American Antiquarian Society,<sup>3</sup> Mallis learned that R Billings was a merchant ~~in Corn Hill, Boston~~ <sup>beginning in</sup> from 1735, and that the sale of items such as scales would certainly have been within his sphere of business. By consulting E P Newman's monumental work *The Early Paper Money of America*<sup>4</sup> he learned that, beginning in 1690 and continuing through 1741, the Massachusetts Bay Colony released ~~several~~ <sup>many</sup> issues of paper money called Tenor. The earliest issue eventually became known as Old Tenor. ~~where~~

Obviously, the Billings' scale was intended to be sold in Massachusetts. <sup>the</sup> Why then, would the Sheppard and Musham scale with a nearly identical label (except for the name of the seller) have been sold by a London merchant? Perhaps the secret could be found in investigation of the engravers, who made the labels.

A visit to the Winterthur Museum Library<sup>5</sup> provided the answer. The writer located a reference (given by F G Fales in an article on engravers<sup>6</sup>) that led to the trade card shown in Fig. 3. The use

Coins	Weight oz. dwt. gr.	Value Old Tenor	Full Law full	Weight oz. dwt. gram.	Gold Old Tenor	Silver Old Tenor
A Guinea.....	5 9	10 10 0	28/-	1	38 0 0	2 10 0
A Half Guinea.....	2 16	5 5 0	14/-	10	19	1 5
A Moidore.....	6 22	13 10 0	36/-	5	10	12 6
A 4 Pistole ps.....	17 8	33	88/-	4	12	10 6
A 2 Pistole ps.....	8 16	16 10	44/-	3	14	7 6
A 1 Pistole ps.....	4 8	8 5	22/-	2	3 16	5
A 3.12 Sterg or. a double Johannes.	18 10	36	96/-	1	1 18	2 6
A 36/- Sterg ps.....	9 5	18	48/-	12	19	1 3
A 18/- Sterg ps.....	4 14	9	24/-	6	9 6	7
A 9/- Sterg ps.....	2 7	4 10	12/-	3	4 9	3 6
A Crown.....	19 8	2 10	6/-	2	3 2	13 3
A Dollar.....	17 12	2 5	6/-	1	1 7	13 3
A Half Dollar.....	8 18	1 2 6	3/-			13 3
A Quar. Dollar.....	4 9	11	1/6			13 3

N. B. 24 Grains to a penny Wt. 20 pen. 1 oz. Sold. by Lewis Deblois at ye Golden Eagle dock Lo.

Fig. 1. ^^ Lewis Deblois' label copied out by Sheppard and Musham. It seems possible that this trade card looked similar to fig. 5. 'Sterg ps' is Sterling piece abbreviated. The 36/- sterling piece referred to is a single Johannes, a Portuguese coin.

The earliest issue eventually became known as Old Tenor. <sup>sup to</sup> <sup>ava</sup>

Obviously, the Billings' scale was intended to be sold in Massachusetts. <sup>the</sup> Why then, would the Sheppard and Musham scale with a nearly identical label (except for the name of the seller) have been sold by a London merchant? Perhaps the secret could be found in investigation of the engravers, who made the labels.

A visit to the Winterthur Museum Library<sup>5</sup> provided the answer. The writer located a reference (given by F G Fales in an article on engravers<sup>6</sup>) that led to the trade card shown in Fig. 3. The use

Fig. 2. << Richard Billings' label in the scale box owned by Mallis. Note that the values on this label are identical to those in fig. 1, indicating that the scales were sold in the same period. There is nothing to show the customer what shop-sign to look out for. Their shop was at 10 & 11 Corn Hill, proving that Boston had numbers at least 25 years before London had them. Note that the picture has been computer-enhanced.





Fig. 3. ^^ Lewis Deblois trade card/bill head engraved in 1757, in the high style favoured by London tradesmen around 1750. Note that the shop has a board above the front-door with his name and other, illegible writing underneath the name. The shop <sup>insigne</sup> is prominently displayed on a pillar on the sidewalk. The eagle has <sup>its</sup> tongue out!

of one card to cover two uses, trade card and bill head, was common in the 18<sup>th</sup> century.<sup>7</sup> The bill or receipt was frequently written on the reverse of the card.

This remarkable engraving by Thomas Johnston holds the answer to many questions. It confirms that Lewis Deblois at the Golden Eagle on Dock Square, Boston, ...imports every spring and fall from London... a great assortment of wares... which if enumerated here would be tedious for the Reader. His place of business is shown with, out in front, its shop <sup>insigne</sup> sign of the Golden Eagle perched on a column. However, since Lewis Deblois' name, the Golden Eagle, and London, are all in large <sup>lettering</sup> type while the word Boston, although mentioned three times, is in smaller <sup>lettering</sup> type and partially obscured by the border designs and ~~the~~ surrounding copy, it is quite possible that a casual reader of the card (such as Sheppard or Musham) would assume London was Deblois' location.

Additional proof that Deblois was a Boston merchant is offered in *U. S. Coin Scales and Mechanical Counterfeit Coin Detectors* by Newman and Mallis.<sup>8</sup> In their chapter on equal-arm balances of the Colonial and Pre-1857 period they include the Billings' scale owned by Mallis, and then add this tantalizing information: a similar pocket scale in a rectangular wood box made without weight compartments, but with identical tables on the label, carries the name of Lewis




Deblois Golden Eagle dock Sq (Boston) as seller and the name of Thomas Johnston of Boston as engraver of the label.

In recent correspondence Newman has provided the following insights into that scale and its label, one of three in his collection, and suggests a reason for Sheppard and Musham's original error. It was an English custom brought to America to name a place, pub, or store after a symbol or emblem. The Golden Eagle is such a symbol for the store. ~~Thomas Johnston~~ <sup>Joseph Thompson</sup> of Boston, the engraver, appears to have done a rather careless job on my label. It reads 'at ye Golden Eagle dock Sq.' There is no comma between 'Eagle' and 'dock.' 'Dock' should be capitalized. The 'Sq' looks like 'La,' as the long 's'; is used and the tail of the 'q'; is worn off. It seems likely that those authors saw this label or one like it."

A few additional items concerning the Billings and Deblois families may be of interest. In records of the Boston Selectmen<sup>9</sup> dated August 15, 1739, Mr. Richard Billings, in behalf of himself and his brother John Billings, desires to hire the two shops in Dock Square, in their present occupation, numbers ten and eleven. On October 10, 1739 the same records show that the Selectmen executed a lease of two shops on Dock Square, numbers ten and eleven, to John and Richard Billings, Tailors, for the term of five years commencing the first of September last past, for the annual rent of Sixty Pounds to be paid to the Town Treasurer at four payments quarterly, and upon such other Conditions, as in the said lease is expressed. Cornhill Street ran across this area, and an undated reference to Dock Square records a Billings' location to the north of Cornhill.

On May 8, 1754 Gilbert and Lewis Deblois presented a petition to the Boston Selectmen that a part of Queen-Street may be widened, or a Lease granted them of the Town's Shops there, on such terms as may be thought reasonable. The land referred to was a piece bounded on one side on Hanover Street and on another by Queen Street at a location

Fig. 4. << Nathaniel Hurd's label. Hurd's shop-sign was probably Justice with scales. Hurd packed his pictures with references to metrology. The man on the left, with his tricorne hat under his arm, has a bag of money in his right hand, and, in his left hand, a striker for the measure in the foreground. The man at the table has an account book and piles of coins. The merchant sitting under the tree, on the right of Justice, is surrounded by bales of goods, and the captain to whom he is talking, gestures towards his ship. The chart gives the weight and value of gold coins and silver coins, the value of the gold being given in Old Tenor and Lawfull Money [New Tenor] and the silver in Old Tenor only. Compare this chart with that of Joseph Richardson of Philadelphia, EQM 1490. The proportions are not what you would expect in a scale-box. Again, this card has been computer-enhanced and may be slightly different from the original.



COINS			Weights	Value	Silver Coins			Weights	Value
	OZ.	Gr.				OZ.	Gr.		
Guinea	0.5	9	10	10.	28/-	Eng Crown	0.19	8 1/2	2.10
Half D.	2	16	5	5	14/-	Half Dillo	9	16 1/2	1.5
Moidore	6	22	13	10	36/-	Dollar	17	12	2.5
Half D.	3	11	6	15	18/-	Half Dillo	8	18	1.2.6
Pistole Piece	17	8	33		88/-	Quarter D.	4	9	11.3
Half D.	8	16	16	10	44/-				
Pistole	4	8	8	5	22/-				
Half D.	2	4	4	2.6	11/-				
Double Joannes or 36 Sterl Piece	18	10	36		96/-				
Single Joannes or 36 Sterl Piece	9	5	18		48/-				
Half D.	4	14	9		24/-				
Quarter D.	2	7	4	10	12/-				

ENGRAV'D Printed & Sold by NAT: HURD.



Fig. 5 >> An anonymous trade card, which could be stuck into the box of any coin-scale imported. Computer-enhanced.

where Queen Street is narrow. *The Memorial History of Boston*<sup>10</sup> refers to Gilbert and Louis Deblois as *braziers on Hanover Street*.

To illustrate the close connections of individuals in Boston trade during colonial times, Boston-born Nathaniel Hurd (1730-1777) engraved more than 38 bookplates, one of them for Lewis Deblois, in Jacobean style. Hurd also engraved an ornate Old Tenor-New Tenor

	Weight	Value	Lowest money	Weight	Gold	Silver
COINS	Oz. dwt. grs.	Old Tenor		Oz. dwt. grs.	Old Tenor	Old Tenor
a Guinea	5 9 10 10 0	0	24	1	38 0 0	2 10 0
a Half Guinea	2 16 5 5 0	0	14	10	19 0 0	1 5 0
a Moidore	6 22 13 10 0	0	36	5	9 10 0	12 0 0
a 4 Pistole	17 8 33 0 0	0	88	4	7 12 0	10 0 0
a 2 Pistole	8 16 10 10 0	0	44	3	5 14 0	7 6 0
a 1 Pistole	4 8 8 5 0	0	22	2	3 10 0	5 0 0
a 3/4 Pistole	3 12 5 0 0	0	16	1	1 18 0	2 6 0
a 1/2 Pistole	1 16 5 0 0	0	8	1	10 0 0	1 3 0
a 1/4 Pistole	8 16 5 0 0	0	4	1	5 0 0	7 6 0
a 1/8 Pistole	4 8 5 0 0	0	2	1	2 10 0	3 9 0
a 1/16 Pistole	2 4 2 5 0	0	1	1	1 5 0	1 9 0
a Crown	10 8 2 10 0	0	6	1	3 0 0	3 6 0
a Dollar	17 12 2 5 0	0	6	1	1 7 0	2 4 0
a Half Dollar	8 18 1 2 6 3/4	0	3	1	1 7 0	2 4 0
a Quarter Dollar	4 9 11 3 1/6	0	1	1	1 7 0	2 4 0

NB 24 Grains to a penny  
 72 20 penny to an ounce

chart with the same data, shown here as Fig. 4, which is reported to have been made about 1765.<sup>11</sup> This chart is illustrated in *Arts and Crafts* and *Early American Silver*.<sup>6</sup> *1765 is not explained* *the basis for the date*

As to Old Tenor conversion labels, the writer has one which is very similar to the Billings' as reported by Mallis, differing primarily in graphic differences but with all data in the same arrangement. The engraved structural columns on the writer's copy are similar to the Billings' example but the wear of the label is such that there is no evidence of decorative scrolls on the top of the label and the drapes at the tops of the columns are similar but do differ, as do other graphic features of the engraving.<sup>12</sup> A curator at the Massachusetts Historical Society<sup>13</sup> stated that Colonial copper-plate engravings were often copied from a sample in a short time, and profit could be earned by the engraver-printer with surprisingly small editions of as few as one hundred pieces.

And, you might ask, what was the need for Old Tenor conversion charts in 1765 when the initial date for redemption of revalued Old Tenor was 1750? Nonetheless, Old Tenor bills continued to circulate. According to Newman, beginning in 1749/50 and continuing until the American Revolution in 1776, the ratio of Old Tenor to Lawful Money (New Tenor) was seven and a half to one. As late as April 1766 the records of Trinity Church, Boston, show that *by cash received from Easter 1765 to Easter 1766 being the contribution for 51 Sundays, 2116 Pounds Six Shillings and Eight Pence Old Tenor was rendered as current 282 Pounds Three Shillings Seven Pence* and thus conforms to that established rate.<sup>14</sup> On all the charts known to Newman, the gold and silver values in Old Tenor relate to the weight units in the column to their immediate left (rather than to the coin weights listed on the far left) thereby dating the sale of those scales to *that period. 1750 or soon thereafter.*

We need no longer ponder the cryptic reference to the Deblois label in Sheppard and Musham. Collectors who have the book may wish to note Deblois' correct location is Boston, not London, and also the proper dating of the label is 1749/50 or soon thereafter.

Many of the scales Sheppard and Musham saw prior to 1922 were destroyed during the Second World War, making their record, although incomplete, of great value to historians. While this account contributes to that record, it by no means exhausts the information that must be available concerning Old Tenor and related labels. The writer or one of the editors would be very happy to hear from any readers with additional data to offer.

#### Notes and References

- 1 Sheppard, T & Musham, J., *Money Scales and Weights*, Spink & Sons, London, 1920-23, reprint 1975, p 41.
- 2 Mallis, A G, *Old Tenor, Equilibrium*, 356-60.
- 3 American Antiquarian Society in Worcester, Massachusetts.
- 4 Newman, E P, *The Early Paper Money of America*, Iola, Wisconsin, 1967, 1976, 1990, & 1999.
- 5 Winterthur Museum Library near Wilmington, Delaware. Neville Thompson, their most gracious and adept



librarian, assisted the author.

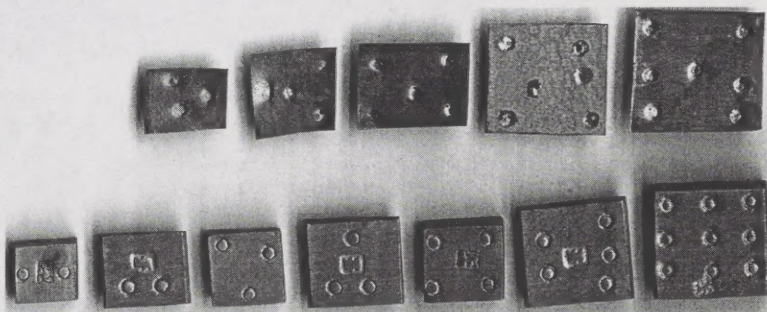
- 6 Fales, M G, *Early American Silver*, N.Y. E.P. Dutton & Co., Inc. 1973; *Coin World*, May, 1970
- 7 Hitchings, S, Thomas Johnson in *Boston Printers and Printmakers 1670-1775*. The article refers to Lewis Deblois at the Golden Eagle, trade card [copperplate engraving] by Thomas Johnston, 1757 [held by] the Henry Francis du Pont Winterthur Museum, Joseph Downs' Manuscript collection No. 66X152 [p. 104].
- 8 Newman, E P, & Mallis, A G, *United States Coins Scales and Counterfeit Coin Detectors*, 1999. Ch. III, sec. I, no. 3.
- 9 *Records of the Boston Selectmens' Minutes*, various dates. See EQM p 1858.
- 10 Winsor, J. *Memorial History of Boston 1881*.
- 11 Fincham, H W, *The Artists and Engravers of British and American Book Plates*, London, Kegan Paul, 1897.
- 12 Mallis, A G, American Counterfeit Coin Detectors, *Equilibrium*, 12-15.
- 13 The Records of Trinity Church, Boston.
- 14 Massachusetts Historical Society in Boston. A curator kindly shared this knowledge in 1992.

#### Author's biography

During his years of teaching mathematics to seventh graders, Eugene P. Mahoney developed a strong interest in English coins of the American colonial period, 1607-1776. After his retirement he expanded his interest to include the scales, weights, and measures of the British colonies in America. An avid researcher, he has contributed several previous articles to *Equilibrium*. Much of his work has been done at the Winterthur Library and Museum in Wilmington, Delaware, with whom he has exchanged information from his own research in return for library privileges. With Gary Batz, he is currently developing a program whereby ISASC members will be encouraged to combine their findings with one another with the ultimate aim of publication.

## Pennyweights and Grains

If coins had to be weighed, the easy method was to put the correct coin-weight on one pan, and add the sheet grain weights to the coin until the scale balanced, then calculate the loss at 2d per grain. If no coin-weights were available, pennyweights (the lower set) were put into one pan with the correct number of grains, as specified on the label for that coin, and then continued with the method above, altogether more fiddly.



## Person scales into Bay

FROM RED MEADE



Weights and Measures inspectors in Los Angeles were very keen to demonstrate their careful watch over traders. When they pushed more than 7000 condemned scales into the water outside the breakwater off Long Beach, they invited the press to photograph the event. They put a label on a coin-op person scale stating SHORT WEIGHT MEANS SHORT LIVED BUSINESS. Another label stated that I STOLE 12 CENTS IN EVERY DOLLAR. Red often referred to the astounding numbers of scales that he saw being destroyed during his working life, and deeply regretted the loss of so many fascinating scales.